

## PhD program in Optics (2013)

The total minimum required number of credits:	94 credits
- Coursework:	24 credits
+ Basic courses:	12 credits
• Required:	09 credits
• Elective:	03/6 credits
+ Advanced foreign languages for academic purposes:	04 credits
+ Advanced courses:	06/12 credits
+ Overview:	02 credits
- Research	
- PhD Thesis:	70 credits

### Available curriculum:

No	Code	Subjects	Credits	Credit hours			Prerequisite
				Lecture	Practice	Self-study	
<b>I</b>	<b>Part 1. Coursework</b>						
<b>I.1</b>	<b>Basic courses</b>		<b>12</b>				
<b>I.1.1</b>	<b>Required</b>		<b>9</b>				
1	PHY8051	<i>Advanced nonlinear optics</i>	3	10		35	
2	PHY8052	<i>Material optics II</i>	3	10		35	
3	PHY8053	<i>Laser for ultrashort light pulses</i>	3	10		35	
<b>I.1.2</b>	<b>Elective</b>		<b>3/6</b>				
4	PHY8054	<i>Optical soliton communication</i>	3	10		35	
5	PHY8055	<i>Microlaser</i>	3	10		35	

No	Code	Subjects	Credits	Credit hours			Prerequisite
				Lecture	Practice	Self-study	
<b>I.2</b>	<b>Advanced foreign languages for academic purposes:</b>		<b>4</b>				
6	ENG 8001	<i>Advanced English for Academic Purposes</i>	4			60	
<b>I.3</b>	<b>Advanced courses</b>		<b>6/12</b>				
7	PHY8056	<i>Quantum laser and optics amplification</i>	3	10		35	
8	PHY8057	<i>Lasers and application</i>	3	10		35	
9	PHY8058	<i>Modern optics II</i>	3	10		35	
10	PHY8059	<i>Optical fiber laser and amplification</i>	3	10		35	
<b>I.4</b>	<b>Overview</b>		<b>2</b>				
11	PHY8060	<i>Research Perspective Report</i>	2			30	
<b>II</b>	<b>Part 2. Research (research planning, publishing ...)</b>						
<b>III</b>	<b>Part 3. Doctoral Thesis</b>						
12	PHY9005	<i>Doctoral thesis</i>	70				
		<b>Total</b>	<b>94</b>				